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New Record Of The Terrestrial Leech *Haemadipsa* Sylvestris (Blanchard,1894) From The Biodiversity Hot Spot Of Nilgiri Biosphere Reserve (Tamilnadu, India)

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Abstract:

In the present investigation the terrestrial leech *Haemadipsa sylvestris* is reported for the first time from Nilgiris part of Western Ghats. This species originally reported from West Bengal, Assam, Arunachal Pradesh, Sikkim, Meghalaya and Uttar Pradesh. This species is found in O valley near Gudalur (11°27′11″N &76°30′12″E), at an elevation of 1,072m above msl. This species is commonly called "Ramar Attai" as vernacular name. The results are documented based on the morphological characters.

Key words

Land leech, Haemadipsa sylvestris, Nilgiri Biosphere Reserve.

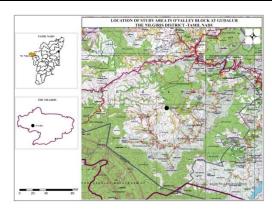
Introduction

Leeches are segmented, haematophagus worms found in moist soils. They are ectoparasites of vertebrates. A total of 82 species of leeches are reported from India. Out of which 15 species are found in Tamilnadu (Moore (1927; Soot and Ghosh (1977); Bandyopathyay and Mandal (2006) and Mandal *et al.*, 2020). Even though detailed studies on leeches are carried out in peninsular of India (Sanjeeva raj and Gladson, 1981 and Mandal *et al.*, 2020). However these reports states that *H. sylvestris* is found only in North India. The critical examination of the species reveals that *H. sylvestris* is found in this region of Nilgiris and the results are discussed(Fig-1).

Material and Methods

Study area

Leeches are collected from the Estates of O vally of Gudalur Taluk with latitude and longitude of 11°27'11"N latitude and 76°30'12"E. They were collected by using regular field visits and brought to the laboratory.



O valley

Identification of specimens

The leeches were brought to the Dept of Zoology, Govt Arts College, Udhagamandalam. They were maintained in containers with moist soil and adequate aeration. The adult leeches are subjected to the morphological characteristics like, colour, size, position of anterior and posterior sucker and location of eyes with Microphotography method (Olympus model *i*39). The results are identified using Chandra (1991) and Mandal *et al.*, (2022).

Haemadipsa sylvestris(Blanchard, 1894)





Result and Discussion

The morphological features of *H. sylvestris* are documented as follows. It is the largest and robust land leech of India. It is commonly known as Indian land leech. It reaches a length of 5 cm or exceeding that. It is locally known as "*Sina jook*". The Colour is plain yellow or brown with three black or dark brown stripes. The median line is narrower often broken or even obsolete. Marginal stripes bright yellow or orange. They are five pairs of eyes. Ventral side is reddish brown with sub-marginal yellowish stripes. Number of suckers rays 74 to 76 but varying between 69 and 80. Caudal sucker is larger than the anterior sucker. Prehensile is papilla little developed. They can swim so it is called amphibious leech. Furrow pits are five pairs on VIII to XII.

This is widely found in Myanmar and Sumatra (Mandal *et al.*, 2022). In India it is found West Bengal, Assam, Himachal Pradesh, Uttar Pradesh, Arunachal Pradesh and Sikkim. In Assam, detailed works are available on the population, biology and control measures of the leech *H. sylvestris* (Leela, 2016). This species is easily recognizable by its morphology by the structure, anterior and posterior sucker as well as three black stripes found in the dorsal side of the leech. Due to the three longitudinal stripes this leech is popularly called as "Ramar atttai" by the folk of this study location.

The distribution is the elevation of 1,072m above msl altitude may be related to its high rain fall moisture soil and moderate climatic condition of 17°C to 21°C during different seasons. The nature of its arrival to this location is not understood. However, it is found in high population is this vicinity. It also forms a menace to cattle, estate workers and ecotourists visiting this area.

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